

# PATENT ABSTRACTS OF JAPAN

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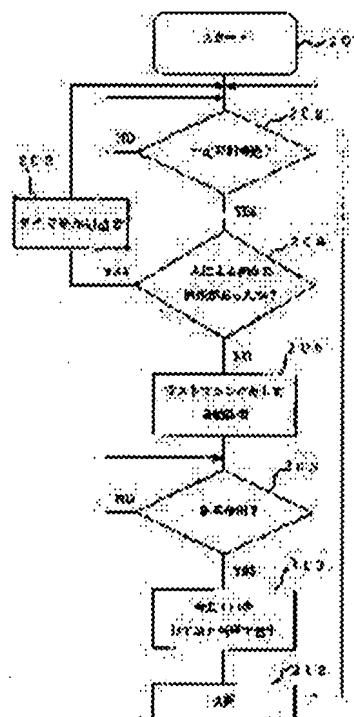
## (54) SAFETY CONFIRMATION SYSTEM

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To provide a safety confirmation system, with which a device installed in the member house of a service applicant is equal with an ordinary telephone set, the cost of the entire system is low and further, labor for a member to connect the device to a telephone line is not required.

**SOLUTION:** After the lapse of fixed time (24 hours, for example), set inside a program for safety confirmation system stored in a telephone set 104 (step 202), it is discriminated whether any operation is manually performed within fixed time or not (step 204). When there is the operation, a timer is started again (step 203).

When there is no operation, a call is automatically originated to a host machine 101 (step 206). When a response from the host machine 101 is detected (step 208), a member ID is sent by a DTMF signal (step 210) and the line is disconnected (step 212).



## LEGAL STATUS

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CLAIMS

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[Claim(s)]

[Claim 1] A check means to check whether the actuation to a self-opportunity has been in said fixed time amount if fixed time amount passes, A dispatch means to send to a host machine when there is no actuation to said self-opportunity, Telephone characterized by having a transmitting means to transmit the signal which shows that safety is unidentified and the information about a self-opportunity to a detection means to detect the response from said host machine, and the response from said detected host machine.

[Claim 2] The signal transmitted and received between said host machines and said telephones in telephone according to claim 1 is telephone characterized by being a DTMF signal.

[Claim 3] The display which displays the various information of the member who connected with the public network and has received service by the telephone line, A retrieval means to be a host machine with a storage means to save said member's various information, and ~~to retrieve~~ the information about the telephone which did not send a signal in said fixed time amount if fixed time amount passes, The host machine characterized by having the control means it is directed to said display that performs presenting of the information about said telephone searched by said retrieval means, and the display to which the check of the safety of the member who is installing said telephone is urged.

[Claim 4] It is the host machine characterized by the identification information of said telephone being acquirable using the addresser discernment function in which said public network has said host machine in a host machine according to claim 3.

[Claim 5] The display which displays the various information of the member who connected with the public network and has received service by the telephone line, A host machine with a storage means to save said member's various information, It is the safety check system which consists of telephones sent to said host machine when it is installed in each \*\*\*\*\* and there is no actuation by said member into fixed time amount. Said host machine A detection means to detect the arrival from the telephone of said \*\*\*\*\* , and a response means to answer to the arrival from said detected telephone, If the signal which shows that safety is unidentified and the information about said telephone from the telephone of said \*\*\*\*\* is received, said member's safety is unidentified, It has the control means it is directed that displays the information about said telephone on said display. Said telephone The safety check system characterized by having a transmitting means to transmit the signal which shows that safety is unidentified and the information about a self-opportunity to a detection means to detect the response from said host machine, and the response from said detected host machine.

[Claim 6] The display which displays the various information of the member who connected with the public network and has received service by the telephone line, A host machine with a storage means to save said member's various information, It is the safety check system which consists of telephones which will take out a notice signal to said host machine if it is installed in each \*\*\*\*\* and actuation by said member is performed. Said host machine The safety check system characterized by directing to said display to perform the display to which presenting of the information about telephone without said notice signal and the check of safety are urged in fixed time amount.

[Claim 7] It is the safety check system characterized by said telephone having a function equivalent to the usual multi-functional telephone in a safety check system according to claim 5 or 6 including an alarm clock alarm, message sound recording, message sound recording, and a telephone answering function in addition to the basic function of dispatch and arrival.

[Claim 8] The signal transmitted and received between said host machines and said telephones in a safety check system according to claim 5 to 7 is a safety check system characterized by being a DTMF signal.

[Claim 9] It is the safety check system characterized by the identification information of said telephone being acquirable using the addresser discernment function in which said public network has said host machine in a safety check system according to claim 5 to 8.

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## DETAILED DESCRIPTION

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### [Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to a safety check system, and relates to the safety check system which can nurse elderly people etc. from a remote place in a detail more.

[0002]

[Description of the Prior Art] The old men of an one-person life are increasing in number every year as advanced-age-izing and the trend toward the nuclear family progress. As the evil condition -- bad -- becoming -- \*\*\*\* -- an injury -- having undertaken -- \*\*\*\*\* -- one -- a person -- a doctor -- it cannot go -- occasionally -- a telephone -- applying -- things -- as -- not becoming -- a case -- being certain -- a sake -- leaving it -- a condition -- getting worse -- making -- \*\*\*\* -- inside -- \*\*\*\* -- death -- after -- what -- a day -- leaving it -- having -- \*\* -- having \*\*ed -- Example -- not being few . That such a problem should be coped with, by JP,10-224756,A, a video camera and a display are installed in the house of a person requiring care, and a home care support system which sends the image photoed with the video camera to an exchange pin center, large from the house of a person requiring care, sends care associated data to the house of a person requiring care from delivery and an exchange pin center, large, and is displayed on a display is offered. However, the system-wide cost of the above systems is high, and they require time and effort for connection of the equipment for transmitting and receiving an image and care associated data.

[0003]

[Problem(s) to be Solved by the Invention] This invention is accomplished in view of the above-mentioned actual condition, and the equipment installed in \*\*\*\*\* which is a service application person is equivalent to the usual telephone, and offers a safety check system with cheap system-wide cost. Furthermore, since the equipment installed in \*\*\*\*\* is telephone, it aims at offering the safety check system which does not require time and effort, like a member connects equipment with the telephone line.

[0004]

[Means for Solving the Problem] A check means to check whether the actuation to a self-opportunity has been in fixed time amount when fixed time amount passed in order that this invention may attain the above-mentioned purpose, A dispatch means to send to a host machine when there is no actuation to a self-opportunity, The telephone characterized by having a transmitting means to transmit the signal which shows that safety is unidentified and the information about a self-opportunity to a detection means to detect the response from a host machine, and the response from the detected host machine is offered. Here, the signal transmitted and received between the telephone of this invention and a host machine is characterized by being a DTMF signal.

[0005] Furthermore, the display which displays the various information of the member who connected this invention with the public network by the telephone line, and has received service, A retrieval means to retrieve the information about the telephone which did not send a signal in fixed time amount if it has a storage means to save a member's various information and fixed time amount passes, The host

machine characterized by having the control means it is directed to a display that performs presenting of the information about the telephone searched by the retrieval means and the display to which the check of the safety of the member who is installing telephone is urged is offered. It is characterized by the ability of the host machine in this invention to acquire the identification information of telephone here using the addresser discernment function which a public network has.

[0006] Furthermore, this invention connects with a public network by the telephone line, and offers the safety check system which consists of a host machine with the display which displays the various information of the member who has received service, and a storage means to save a member's various information, and telephone sent to a host machine when it is installed in each \*\*\*\*\* and there is no actuation by the member into fixed time amount. If the signal which shows that safety is unidentified and the information about telephone is received from a detection means to by\_ which a host machine detects the arrival from the telephone of \*\*\*\*\* here, a response means answer to the arrival from the detected telephone, and the telephone of \*\*\*\*\* , it will be characterized by to have the control means it is directed that displays that a member's safety is unidentified and the information about telephone on a display. Moreover, telephone is characterized by having a transmitting means to transmit the signal which shows that safety is unidentified and the information about a self-opportunity to a detection means to detect the response from a host machine, and the response from the detected host machine.

[0007] Furthermore, this invention connects with a public network by the telephone line, and offers the safety check system which consists of a host machine with the display which displays the various information of the member who has received service, and a storage means to save a member's various information, and telephone which will take out a notice signal to a host machine if it is installed in each \*\*\*\*\* and actuation by the member is performed. Here, a host machine is characterized by directing to a display to perform the display which stimulates presenting of the information about telephone without a notice signal, and the check of safety in fixed time amount.

[0008] In addition to the basic function of dispatch and arrival, in the above-mentioned safety check system, telephone is characterized by having a function equivalent to the usual multi-functional telephone including an alarm clock alarm, message sound recording, message sound recording, and a telephone answering function. Moreover, in the above-mentioned safety check system, the signal transmitted and received between a host machine and telephone is a DTMF signal. Moreover, in the above-mentioned safety check system, a host machine can acquire the identification information of telephone using the addresser discernment function which a public network has.

[0009]

[Embodiment of the Invention] Next, with reference to drawing 1 -5, the gestalt of operation of the safety check system by this invention is explained to a detail. Drawing 1 is the whole safety check system block diagram by this invention. Drawing 2 and drawing 3 are drawings explaining the gestalt of the 1st operation by this invention, and the processing flow Fig. of the telephone with which drawing 2 constitutes the safety check system by this invention, and drawing 3 are the sequence diagrams of the telephone which constitutes a safety check system, and a host machine. Drawing 4 and drawing 5 are drawings explaining the gestalt of the 2nd operation by this invention, and the processing flow Fig. of the host machine with which drawing 4 constitutes the safety check system by this invention, and drawing 5 are the sequence diagrams of the telephone which constitutes a safety check system, and a host machine.

[0010] It explains referring to drawing 1 about \*\*\*\*\* , a public network, and the whole nursing pin center, large configuration. In addition to the basic function of dispatch (an auto-sending function is included) and arrival, the telephone 104 with a function equivalent to the usual multi-functional telephone is installed in \*\*\*\*\* 105 which has received service of a safety check system including an alarm clock alarm, message sound recording, message sound recording, and a telephone answering function. Here, it has connected with a public network 103 and telephone 104 is performing access to a public network using the DTMP signal (PB signal). Furthermore, the program for safety check systems by this invention is memorized by telephone 104. The host machine 101 is installed in the nursing pin center, large 106 which offers service of a safety check system. Host machines 101 are computers, such

as PC (personal computer) or WS (workstation) linked to the display 102 which displays a member's various information. The host machine 101 is connected with the public network 103 by the telephone line.

[0011] The host machine 101 possesses the DTMF receiving set (not shown) for communicating with telephone 104 through a public network 103, and the addresser number identification unit (not shown) which acquires the identification information of telephone 104 using the addresser discernment function which a public network 103 has. Furthermore, a host machine 101 manages a member database, or has the storage region for keeping a member's safety information. Moreover, the program of the safety check system by this invention is memorized by the host machine 101. member  
DB

[0012] The gestalt of operation of the 1st of the safety check system by this invention is explained using the flow chart of drawing 2. Progress of fixed time amount (for example, 24 hours) set up within the program for the safety check systems memorized by telephone 104 judges whether a certain actuation by people was in fixed time amount (step 204). (step 202) When there is actuation, a timer is covered again (step 203). When there is no actuation, it auto-sends to a host machine 101 (step 206). If the response from a host machine 101 is detected (step 208), a DTMF signal will see out and (step 210) cut Member ID (step 212).

[0013] Processing when actuation of the telephone 104 by the member is not performed in fixed time amount is explained using drawing 3. When actuation of the telephone 104 by the member is not performed in fixed time amount, telephone 104 is sent to a host machine 101 (auto-sending). Carrying out automatic answering of the host machine 101 to the arrival from telephone 104, the telephone 104 which received the reply signal transmits a DTMF signal including the information showing the member concerned safety un-checking, and member ID information (identification information) to a host machine 101. The host machine 101 which received the DTMF signal displays the information sent by the DTMF signal on a display 102. Based on the displayed information, the service provider in the nursing pin center, large 106 telephones \*\*\*\*\* 105, safety is checked, or dispatches people there and checks a member's safety.

[0014] In addition, although Member ID was included in the DTMF signal in the above-mentioned explanation, since the host machine 101 possesses the addresser number identification unit, it can also acquire the identification information of telephone 104 using the addresser discernment function which a public network 103 has. Therefore, it is not necessary to include Member ID in a DTMF signal depending on program specification. With the gestalt of the 1st operation, telephone 104 is notifying to the host machine 101, when there is no actuation of a member. With the gestalt of the 2nd operation, in consideration of failure generating of telephone 104 or the telephone line, when there is actuation from a member, it notifies to a host machine 101. And in a host machine 101 side, it is made to give an indication to which the safety check over the telephone 104 without a notice is urged.

[0015] The gestalt of operation of the 2nd of the safety check system by this invention is explained using the flow chart of drawing 4. Progress of fixed time amount (for example, 24 hours) set up within the program for the safety check systems memorized by the host machine 101 judges whether the notice was in fixed time amount from telephone 104 (it is shown that there was a certain actuation by the member) (step 404). (step 402) When there is a notice, a timer is covered again (step 403). When there is no notice, it directs to give an indication to which a safety check of a member is urged to a display 102 (step 406).

[0016] Since telephone 104b in drawing 5 had actuation of telephone 104b in fixed time amount, it has sent out the notice of telephone actuation to the host machine 101. On the other hand, there is no signal sent out since telephone 104a did not have actuation of telephone 104a into fixed time amount. A host machine 101 checks the existence of the notice of telephone actuation from each telephone (104a and 104b are included) every fixed time amount. And if the telephone ( drawing 5 telephone 104a) which did not have the notice of telephone actuation into fixed time amount is checked, it directs to urge checking safety to the owner (member) of the telephone 104a on a display 102. Based on the displayed information, the service provider in the nursing pin center, large 106 telephones \*\*\*\*\* 105, safety is checked, or dispatches people there and checks a member's safety.

[0017] In addition, any are sufficient as "actuation of telephone 104" mentioned above among an alarm clock alarm besides basic operation including sending-and-receiving actuation, message sound recording, message sound recording, and setting actuation of a telephone answering function. Moreover, when a safety check carbon button (or carbon button equivalent to this) is prepared in telephone 104 and the above basic operation and setting actuation are not performed, it is also possible to regard a safety check carbon button depression as "actuation of telephone 104." As mentioned above, although the gestalt of operation of the safety check system by this invention was explained to the detail, this invention is not limited to the gestalt of the above-mentioned operation, and can be changed in the range which does not deviate from the summary.

[0018]

[Effect of the Invention] Thus, according to the safety check system by this invention, the equipment installed in \*\*\*\*\* which is a service application person is equivalent to the usual telephone, and it is possible to offer a safety check system with cheap system-wide cost. Furthermore, since the equipment installed in \*\*\*\*\* is telephone, it is possible to offer the safety check system which does not require time and effort, like a member connects equipment with the telephone line.

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**TECHNICAL FIELD**

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PRIOR ART

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[Description of the Prior Art] The old men of an one-person life are increasing in number every year as advanced-age-izing and the trend toward the nuclear family progress. As the evil condition -- bad -- becoming -- \*\*\*\* -- an injury -- having undertaken -- \*\*\*\*\* -- one -- a person -- a doctor -- it cannot go -- occasionally -- a telephone -- applying -- things -- as -- not becoming -- a case -- being certain -- a sake -- leaving it -- a condition -- getting worse -- making -- \*\*\*\* -- inside -- \*\*\*\* -- death -- after -- what -- a day -- leaving it -- having -- \*\* -- having \*\*ed -- Example -- not being few . That such a problem should be coped with, by JP,10-224756,A, a video camera and a display are installed in the house of a person requiring care, and a home care support system which sends the image photoed with the video camera to an exchange pin center, large from the house of a person requiring care, sends care associated data to the house of a person requiring care from delivery and an exchange pin center, large, and is displayed on a display is offered. However, the system-wide cost of the above systems is high, and they require time and effort for connection of the equipment for transmitting and receiving an image and care associated data.

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**EFFECT OF THE INVENTION**

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[Effect of the Invention] Thus, according to the safety check system by this invention, the equipment installed in \*\*\*\*\* which is a service application person is equivalent to the usual telephone, and it is possible to offer a safety check system with cheap system-wide cost. Furthermore, since the equipment installed in \*\*\*\*\* is telephone, it is possible to offer the safety check system which does not require time and effort, like a member connects equipment with the telephone line.

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**TECHNICAL PROBLEM**

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[Problem(s) to be Solved by the Invention] This invention is accomplished in view of the above-mentioned actual condition, and the equipment installed in \*\*\*\*\* which is a service application person is equivalent to the usual telephone, and offers a safety check system with cheap system-wide cost. Furthermore, since the equipment installed in \*\*\*\*\* is telephone, it aims at offering the safety check system which does not require time and effort, like a member connects equipment with the telephone line.

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DESCRIPTION OF DRAWINGS

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[Brief Description of the Drawings]

[Drawing 1] The nursing center by this invention, a public network, and the whole telephone block diagram.

[Drawing 2] The processing flow Fig. of the telephone explaining the gestalt of the 1st operation by this invention.

[Drawing 3] The sequence diagram explaining the gestalt of the 1st operation by this invention.

[Drawing 4] The processing flow Fig. of the telephone explaining the gestalt of the 2nd operation by this invention.

[Drawing 5] The sequence diagram explaining the gestalt of the 2nd operation by this invention.

[Description of Notations]

101: Host machine

102: Display

103: Public network

104,104a, 104b: Telephone

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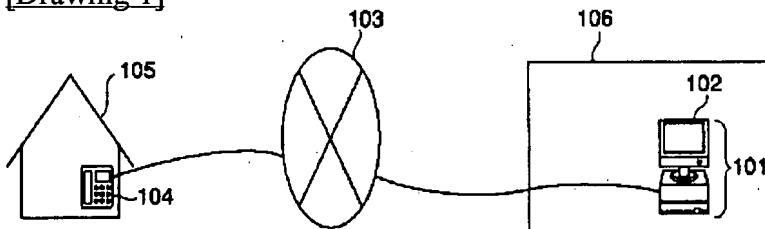
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DRAWINGS

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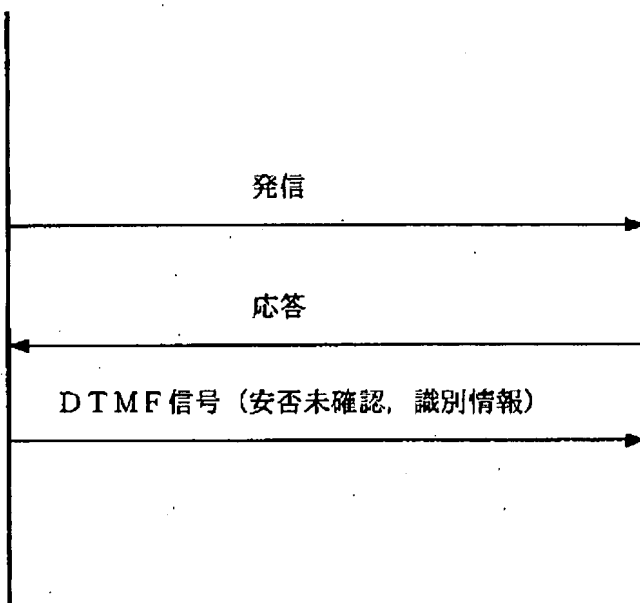
[Drawing 1]



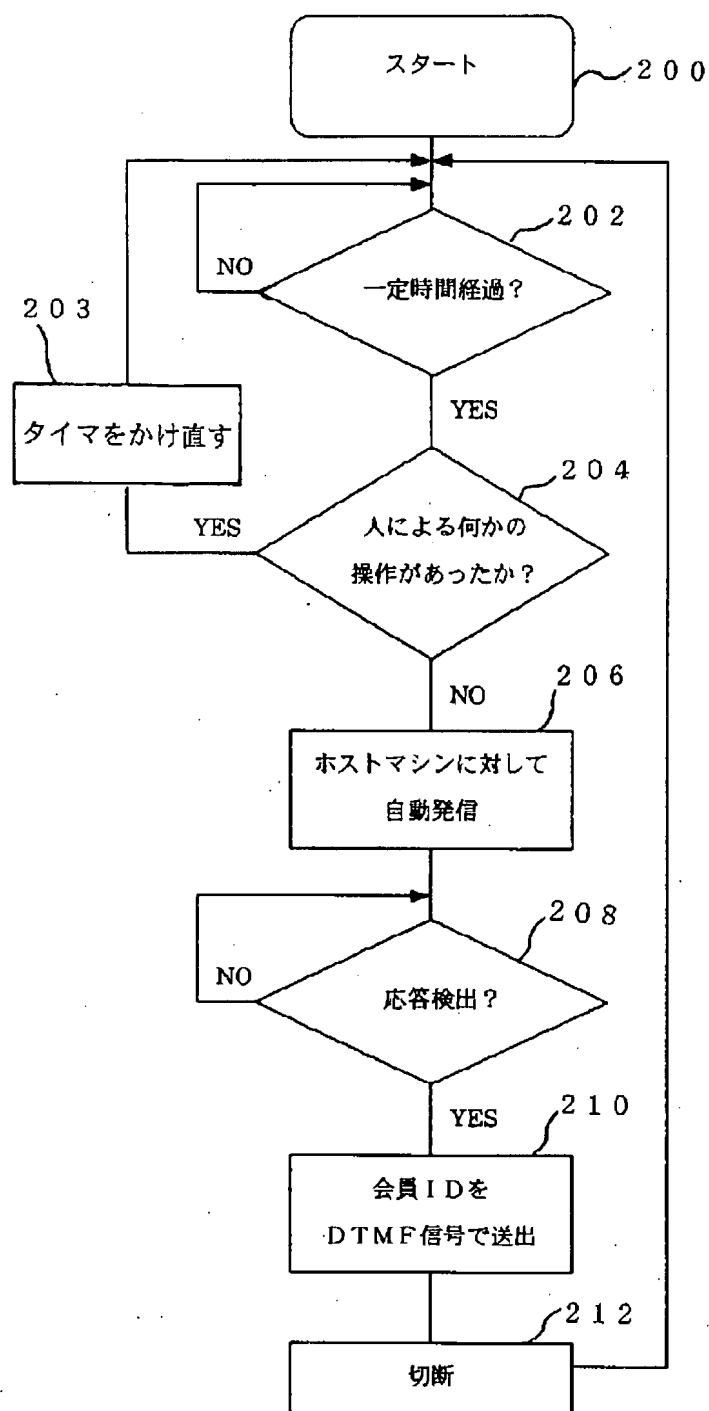
[Drawing 3]

電話機 1 0 4

ホストマシン 1 0 1

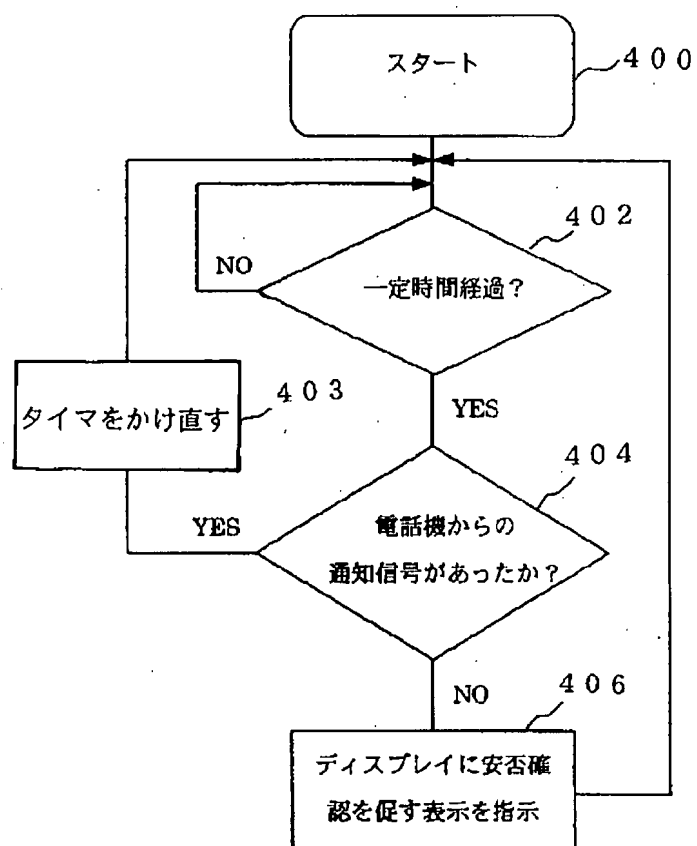


[Drawing 2]



Drawing 2

[Drawing 4]

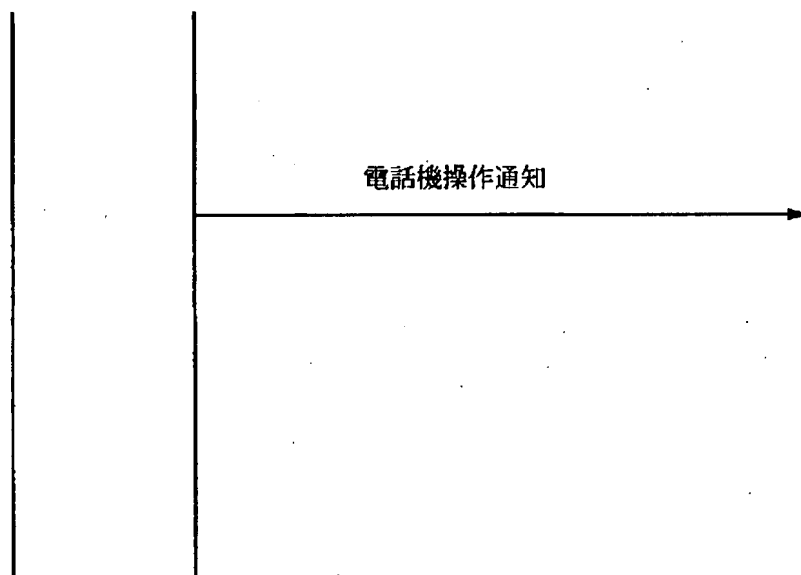


[Drawing 5]

電話機 104 a

電話機 104 b

ホストマシン 101



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